R E P O R T R E S U M E S

ED 014 830 EC 000 760

SPEECH DEVELOPMENT AND IMPROVEMENT FOR THE MENTALLY RETARDED CHILD.

BY- BEARDSLEY, BARBARA
WISCONSIN STATE DEPT. OF PUB. INSTR., MADISON

REPORT NUMBER WB-19 PUB DATE MAR 63
EDRS PRICE MF-$0.25 HC-$0.80 18P.

DESCRIPTORS- *MENTALLY HANDICAPPED, *EXCEPTIONAL CHILD EDUCATION, *SPEECH HANDICAPPED, *SPEECH THERAPY, SPEECH IMPROVEMENT, LANGUAGE DEVELOPMENT, ARTICULATION (SPEECH), AUDITORY DISCRIMINATION, CHILDREN, INSTRUCTIONAL MATERIALS, RETARDED SPEECH DEVELOPMENT, SPEECH CURRICULUM, SPEECH HANDICAPS, SPEECH INSTRUCTION, SPEECH TESTS, SPEECH THERAPISTS, TEACHING GUIDES,

GOALS OF A SPEECH IMPROVEMENT PROGRAM FOR THE MENTALLY RETARDED IN WISCONSIN ARE DESCRIBED. THE FOLLOWING VARIOUS ASPECTS OF THE SPEECH PROGRAM ARE PRESENTED--(1) DEVELOPMENT OF A DELAYED SPEECH PROGRAM, (2) USE OF SOCIAL SKILLS FOR SPEECH PRACTICE, (3) REMEDIAL PROGRAM FOR DEFECTIVE ARTICULATION, AND (4) AUDITORY TRAINING. TYPES OF DEFECTS, A MODIFIED ARTICULATION TEST FOR RETARDED CHILDREN, AND SUGGESTIONS FOR INSTRUCTIONAL MATERIALS ARE DISCUSSED. A BIBLIOGRAPHY OF 49 ITEMS AND A LIST OF SOURCES OF MATERIALS ARE INCLUDED. (MK)

ED014830

WISCONSIN

Bulletin #19

SPEECH DEVELOPMENT AND IMPROVEMENT for the MENTALLY RETARDED CHILD

Prepared by

BARBARA BEARDSLEY
Speech Correctionist,
Brodhead and Monroe
Public Schools

March, 1963

DEPARTMENT OF PUBLIC INSTRUCTION
Angus B. Rothwell
State Superintendent

BUREAU FOR HANDICAPPED CHILDREN
John W. Melcher, Director
Asst. State Superintendent

EC 000 760

WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION
Bureau for Handicapped Children
122 West Mifflin Street
Madison 3, Wisconsin

SPEECH CORRECTION SERVICES
Gretchen M. Phair, *Supervisor*
Vernon J. Smith, *Supervisor*

SERVICES FOR MENTALLY RETARDED
Kenneth R. Blessing, *Coordinator*
Victor J. Contrucci, *Supervisor*
Melton C. Martinson, *Supervisor*
Heinz Pfaeffle, *Supervisor*

2500–18

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

FOREWORD

The retarded child has many needs. A basic requirement for successful adjustment of a mentally retarded individual is adequate speech and language development. A large per cent of the mentally retarded child population have major speech and language deficiencies that can be removed or ameliorated by qualified speech correctionists. The Bureau for Handicapped Children strongly feels that speech therapists should work intimately with teachers of the mentally retarded so that all retarded children may receive every benefit possible. This publication by Miss Beardsley should be of considerable help in amalgamating the services of speech therapists, supervisors of special education and teachers of the mentally retarded.

JOHN W. MELCHER
Director, *Bureau for Handicapped Children*

PREFACE

On the following pages, teachers of classes for the mentally retarded will find a wealth of suggestions for use in speech development and improvement programs. This publication meets a long-felt need of special educators, a concern frequently expressed to state consultants in mental retardation during classroom visitations or in teacher conferences and group meetings. It further represents the cooperative efforts of local and state special educators concerned with the speech and language problems of those less-endowed children found in special classes.

Miss Beardsley's work as a speech correctionist in the Brodhead and Monroe Public Schools early brought her into contact with children with retarded mental development. This booklet is the result of her intimate contacts with children displaying varying degrees of speech and language deficits. It is representative, too, of the current, more positive attitude reflected by her professional coworkers with respect to the possible modification of these speech and language deficits so frequently encountered within mentally retarded populations. When one considers that the possession of adequate speech and communicative ability may be the decisive factor in the later vocational and social adjustment of the adult retardate, this more positive attitude and willingness to provide speech development programs for young retarded children is both commendable and praiseworthy. Miss Beardsley is to be commended for her pioneering efforts in this problem area.

Special acknowledgements are due Mrs. Gretchen Mueller Phair and Mr. Vernon J. Smith, State Speech Correction Supervisors, for their helpful suggestions and for provision of a comprehensive bibliography and listing of source materials to be found at the end of this publication. This reference source will provide special class teachers with background information on speech and language problems as well as practical ideas for classroom implementation. These references will serve to clarify the role of the classroom teacher in a speech development and improvement program, both individually and in conjunction with the local speech therapist.

Special teachers will find this guide particularly useful in meeting one of the persisting life needs of the mentally retarded, i.e., *learning to communicate ideas*. This is Goal No. 4 of the statewide curriculum project concerned with persisting life needs or situations encountered by the retardate throughout his life.

Special thanks are expressed to Mrs. Ruth Johnson, Bureau Secretary, for patient work in the editing and printing of this bulletin.

Kenneth R. Blessing

SPEECH DEVELOPMENT AND IMPROVEMENT FOR THE MENTALLY RETARDED

	Page
FOREWORD	i
PREFACE	ii
I. INTRODUCTION	1
II. GOALS FOR THE RETARDED	1
Minimum Goals	1
Maximum Goals	1
Realistic Goals	1
III. SPEECH DEVELOPMENT AND IMPROVEMENT	1
Points To Remember	1
Delayed Speech Program	2
Development of speech program	2
Units on social skills	2
Group games	3
Books and records	3
Defective Articulation	3
Goals	3
Special problems	4
Points to remember	4
Auditory training or discrimination	4
Steps	4
Grouping	5
Activities	5
Sounds in isolation	6
Sounds in structured speech	6
A Modified Articulation Test for Retarded Children	7
Articulation testing in the special classroom	7
Types of defects	7
Mental age referents	8
IV. BIBLIOGRAPHY	9
V. SELECTED BIBLIOGRAPHY AND SOURCES OF MATERIALS	10 thru 13

SPEECH DEVELOPMENT AND IMPROVEMENT FOR THE MENTALLY RETARDED

INTRODUCTION

There is a higher incidence of speech disorders among mentally retarded persons than among people with normal intelligence. This does not mean that all mentally retarded persons have a speech and language deficiency but generally the lower the intelligence quotient the less speech development, with the severely retarded developing very little or no speech. Mental retardation is second only to hearing loss in causing delayed speech and it is of utmost importance that hearing loss be eliminated as a possible cause before speech improvement begins.

Is speech development and improvement justified? In the past many have argued that the low learning capacity rendered speech work a waste of time. However, without speech as an adequate means of self-expression and communication the child's intellectual and emotional development will suffer and resulting anxiety and frustrations may produce behavior problems. Gains from a speech program show results in social and personal adjustment by improving communication and self-expression. Acceptable speech can be developed as an asset in the majority of retarded learners.

GOALS FOR THE RETARDED

Minimum Goals

The ability to use a large variety of words for common objects, days of the week, own name, names of important persons, articles of clothing, articles of furniture; to carry on a conversation, to use the telephone, to tell a personal experience, to use a sentence of five or six words, to give an address, and to deliver a simple verbal message.

Maximum Goals

The ability to speak without infantile articulation, use good sentence structure, tell a story, explain an event or how something is done or made, converse and use a varied vocabulary that includes adjectives and adverbs.

Realistic Goals

For retarded children, classroom teachers should set realistic goals in terms of each individual child, the etiology and prognosis, the level of retardation, and the individual assessment of current speech and language abilities. There must be awareness and recognition during the evaluation and training phases that speech and language proficiency does not always vary directly with respect to measured intelligence (IQ) or mental age. For example, a child with an etiological history of organic brain damage and a measured intelligence quotient of 85 might conceivable never attain the speech proficiency of an otherwise etiologically uncomplicated retardate with a measured intelligence quotient of 65. In terms of realistic goals, and because of the greater risk of encountering multiply handicapping conditions among the retarded, the concept of *individual differences* has even greater implications for planned programs of speech development and improvement.

SPEECH DEVELOPMENT AND IMPROVEMENT

Points to Remember

1. Good rapport and a friendly, wholesome atmosphere of acceptance and encouragement are necessary.

2. Use meaningful and stimulating material. Repetition is necessary and constant repetitions should be presented in different ways.

3. Use AVKR (auditory-visual-kinesthetic-rhythmic) presentation of material whenever possible.

4. Grade the learning steps and follow that order in presenting lessons. Do not press the child for sound production before he is ready. Usually this will be when auditory discrimination has been established.

5. Plan your speech program with the aid of a speech therapist. She will give you suggestions for materials and methods. Refer the severe cases of delayed speech and articulation, hearing loss, stuttering, voice defects and cerebral palsy to the therapist.

6. Frequent short speech improvement lessons are necessary and may be combined with reading and spelling material on many occasions.

7. Insist on verbal responses of some type appropriate to the child's ability.

8. Children learn grammar sentence usage, and phrasing and expression by imitation. The teacher's voice should contribute by having a pleasing quality, correct diction and correct pronunciation.

9. Incorporate, as much as possible, the use of physical activity with speech training.

Delayed Speech Program

Causes of peripheral hearing loss, aphasia, autism and mental retardation should be carefully evaluated. Many of the goals and materials of a delayed speech program coincide with the primary and intermediate language arts programs.

Possible Development of A Speech Program:

1. *Naming objects*—Use actual objects in the child's environment; then use models and pictures of the objects the child can match and identify.

2. *Days and months*—Use calendars, scrapbooks, etc. Stress holidays. Associate activities with the days of the week and holidays.

3. *Child's own name, address, streets in town*—Dramatize a bus ride, use pictures, etc.

4. *Discrimination of forms*—Cut out, feel, and display.

5. *Social courtesies*—Please, thank you, excuse me, Yes, Mrs., etc.

6. *Express one's self correctly*—Insist on a verbal response; use adverbs and adjectives.

7. *Answer a question with more than one word*—No gestures.

8. *Speak in complete sentences.*

9. *Carry a verbal message*—To other teacher or to the principal.

10. *Talk on the telephone*—Answer properly and make the necessary calls.

11. *Report on a trip*—Utilize planned field trips for reports and to build vocabulary.

Units on social skills
Situations giving practical knowledge and experience

1. *Welcoming friends* (greetings)—Introducing friends to parents, or teachers, or to each other.

2. *Planning an event*—Such as a party or program for parents.

3. *Borrowing and lending.*

4. *Running errands.*

5. *Asking and giving directions.*

6. *Telephoning.*

7. *Making announcements.*

8. *Short talks.*

9. *Simple opinions and impressions.*

Stress as much oral expression in the classroom as possible. The above units can be initially discussed and dramatized and should be repeated and practiced as frequently as needed to become routine.

Group games can be used to increase awareness of sounds about them and encourage recognition and production.

1. *Whisper games*—Teacher whispers a "secret word" directly into the child's ear and the children pass it around a circle, ear to ear, trying to tell it clearly.

2. *Picture charades*—Cardboard cutouts of animals parade behind a stage screen. The child who says the correct animal sound and name first receives the picture.

3. *Animal sounds*—The children appear, one at a time, "on the stage" behind the screen. Each makes a sound of an animal and the other children guess the name of the animal.

4. *Motion songs*—Do not expect the children to sing well until the motions are learned.

Examples—A Hunting We Will Go Looby Loo

Hickory Dickory Dock Itsy-Bitsy Spider

Books and records are excellent for speech stimulation.

Books

1. Brown, Margaret W. *The Indoor Noisy Book*. New York: William K. Scott, Inc., 1942.
2. _____, *The Country Noisy Book*, New York: William K. Scott, Inc., 1940.
3. Crampton, G., *Noises and Mr. Fliberty Jib*. New York: Simon and Schuster, 1947.
4. Horn, B. M., *See It, Say It, Do It*. Racine: Whitman Publishing Co., 1951.
5. National Dairy Council, *What We Do Day by Day*. Chicago: National Dairy Council, 1950.
6. Stoddard, Mary A., *Picture Sounding Rhymes*. Racine: Whitman Publishing Co., 1943.
7. Winshio, F.S., *See It*. Racine: Whitman Publishing Co., 1952
8. Zedler, E. Y., *Listening for Speech Sounds*. New York: Harper, 1956.

Records

1. Genie, the Magic Record (Decca).
2. What's Its Name? (Auditory Training record by Jean Utley, Maico Co.).
3. I'm Dressing Myself (Young People's Records, Inc.).
4. The Little Fireman (Young People's Records, Inc.).
5. The Circus Comes to Town (Young People's Records, Inc.).
6. I Wish I Were _____ (Children's Record Guild, 27 Thompson St., N.Y.).
7. Let's Help Mommy (Children's Record Guild).
8. Old MacDonald Had a Farm (Little Golden Record).
9. The Choo Choo Train (Little Golden Record).
10. Tootle (Little Golden Record).

Defective Articulation

Goals

Correct *production* of the sounds of the English language, *adjustment* of negative attitudes with consequent reduction of feelings of inferiority, anxiety and embarrassment are an essential and major part of speech work.

Keep the child's mental and physical limitations in mind and set up *realistic* specific goals.

Special problems

1. Lack of motivation or over-stimulation – Use interesting materials, show him the need for correct speech articulation.
2. Perseveration – Don't attempt to correct two similar sounds consecutively.
3. Overactivity and distractibility – Have optimum conditions and keep distracting stimuli to a minimum.
4. Emotional factors and anxiety – Establish good rapport.
5. Defeatism and resentment – Reward his efforts in a positive manner.

Points to remember

1. Check the child's hearing.
2. Keep a phonetic assessment of the child's articulation.
3. Start with easily seen and heard sounds and the sounds the child can successfully produce. Then, proceed to more difficult sounds.
4. Reward efforts with praise but avoid too much meaningless praise.
5. Use the multi-modality approach (AVKR).
6. Remember to use physical activity with speech training. For example, the teacher might have a small group tiptoe around the room while saying, "Tiptoe," if they are working on the *t* sound. Children might make believe they are chopping wood while saying, "Chop," if they are stressing *ch*. This approach serves two purposes. It is self-demonstration for the child and it channels into useful activity some of the excess energies exhibited by some of these children.

Auditory training or discrimination

Auditory training or discrimination is carried on in order to increase awareness of specific sounds. In the process of developing speech and language children pass through several developmental stages. A young child begins by listening to others. Next, he listens to himself as he imitates the heard speech of others and then he compares the two productions. Finally, he modifies his own speech to more closely fit the most frequently encountered model. Therefore, it is extremely important that the retarded child be taught *self-listening* skills before proceeding to the more advanced stages of auditory training or discrimination. It is generally easier to develop self-listening skill by using other dimensions of voice, such as intensity and pitch. Several simple techniques for improving self-listening skills follow:

1. Have the child begin with a loud sound. He is then to take steps and with each step he repeats the sound, only more softly each time. The child should then judge whether his decreases in volume were in even steps.
2. The child can imitate simple three note melodies produced by the teacher. He can also be requested to sing a low note, a high note, etc. The teacher can make a stepladder scale and by pointing to a step, ask the child to sing a note approximately at that pitch. The number of rungs may vary with the individual child or group in question.
3. Make a telephone out of a milk carton so that it covers the child's mouth and ear. Whenever the child speaks, he has immediate directed feedback into his ear.

As the retarded child begins to demonstrate an increased awareness of specific sounds, he is ready for the next phases of auditory training and discrimination. No sound production is asked of the children in the initial stages, but responses usually come before an attempt is made to elicit them. It is important to follow the following steps in the order indicated and at the rate the children are able to proceed at. Establishment of strong foundations at each of the previous stages makes the speech training that follows much easier to accomplish.

Steps

1. Discrimination of *gross* sounds – ex., animal noises, things rattling. Present one or two sounds and add more.

2. Phonetically *dissimilar* sounds – Present a sibilant (s) and a plosive (b) and a nasal (m). Start with few, add more.

3. Acoustically *related* sounds – Present several sibilants (s, z, sh, th), plosives (p, b, t, d, k, g), or nasals (m, n, or ng).

4. *Error* and *correct* production – Teacher imitates poor production and correct production and establishes concepts of right or wrong, good or bad, correct or poor. Teacher may use a tape recorder.

5. Production in *isolation* – Don't criticize too much. Sound stimulus method is good for the classroom teacher. Sometimes a child can produce a correct sound in words but not in isolation. Take advantage of this. Use words; do not insist on production of sound in isolation.

6. Use of the sound in *structured* speech.

7. Carry-over of the sound into *natural* speech situations.

Grouping

1. General – Same auditory training for all children in the group or class.

2. Specific – Additional auditory training for individuals or small groups with specific, similar errors.

Activities for auditory training

1. *Scrapbooks*.

2. *Hide and Seek* – ex., Find objects beginning with *th*.

3. *Lotto games* – Identify and place card on correct picture.

4. *Picture games* – Gross and fine discrimination. Four pictures on a card, one with *th* sound. "Find the angry goose sound."

5. *Flag the sound* – Oral presentation of a series of similar sounds or a series of phonetically similar words, or recordings, or read stories emphasizing particular sounds. Each child waves a small flag when he hears the sound. Or:

   a. Put toy money in a bank.

   b. Paste objects on a form.

   c. Put turkey feathers on a turkey.

   d. Add stars to a chart.

   e. Take a colored counter from a pile and give one back if a mistake is heard.

   f. Place coal in first, second, or third car of train if *th* is in initial, medial or final position of word. (This may prove to be too difficult for many children.)

6. *Picture sound game* – Two pictures on the right side of a card and three pictures on the left side. When teacher says, "Find the ball," the child connects the string from the ball on the left to the ball on the right.

7. *Musical chairs* – Children move as long as the teacher makes a certain sound and they sit down when she stops. Child without a chair is out.

8. *Who Am I?* A child represents an animal, machine or object which makes the "critical sound." The one making the proper identification jumps up and repeats the sound.

9. *Tap a Bell* – The teacher reads a short story containing many *th* sounds. When the sound is produced incorrectly, the child taps a bell.

10. *Sound Hopscotch* – The child advances one step when he hears the sound and goes back one if he identifies it incorrectly.

11. *Listen-Act Game* – The child does what the word tells him to do if it has the sound in it. Ex., for *s skip*, hop, *sweep*, run, *stand*.

Production in isolation

1. *AVK Method* – Teacher should provide much auditory stimulation and compare correct and incorrect productions. Pupil and teacher compare lips, tongue and teeth position while watching in the mirror. Pupil feels how various sounds are produced.

2. Cards are dealt with various pictured sounds on them. Teacher says, "I would like the "angry goose sound." If the child has the card he says *th* and puts the card down. If he improperly identifies the sound, he picks one card up.

Sounds in structured speech

1. Staged telephone conversations.

2. "Broadcast" on a tape recorder.

3. Fill-in stories and poetry. For example, such nursery rhymes as Three Little Pigs – "I'll huff and I'll puff. ." Chicken Little – "The sky is falling. We must go tell the king."

4. Creative dramatics.

5. Integration of speech activities into total learning process.

In most special classroom speech programs stronger emphasis could be placed upon the use of words, materials and concepts related to the home, school, and community which would help to make good speech more meaningful. Sounds, words and concepts stressed in the speech program should be immediately incorporated into other aspects of the daily school program. The more frequently these sounds and words are used under the teacher's guidance, the more rapidly correct sound production becomes a habit.

In the same vein, the special teacher may develop concepts by utilizing words she has used in the speech program. As an example, if several children are working on the production of *t*, she might use "*t*op-bo*tt*om." She can demonstrate as they say the words, using a concrete object, e.g., a box or a sheet of paper. Then during number work, she might follow this speech activity up by asking, "Where on the page will you begin? Where will you end?" Similar re-introductions of the current speech sounds could be made in the science, social studies and other skill subject areas.

A Modified Articulation Test for Retarded Children

(Excerpted from *Speech and Hearing Hurdles* by John V. Irwin and John K. Duffy Columbus: School and College Service, Sta. B., 1951.

Positions

Top age of Development	Sound	Initial		Medial		Final		Isolation		Type of Defect
3½	p	*p*en		pu*pp*y		ca*p*		p		
3½	b	*b*oy		ba*b*y		tu*b*		b		
3½	m	*m*an		mo*mm*y		di*m*e, ti*m*e		m		
3½	h	*h*and		*a*h*a*				h		
3½	w	*w*agon		*a*w*a*ke				w		
4½	t	*t*oe		ki*tt*en		boa*t*		t		
4½	d	*d*o		da*dd*y		be*d*		d		
4½	n	*n*o, *kn*ife		pe*nn*y		ca*n*		n		
4½	k	*c*ow		coo*k*ie		boo*k*		k		
4½	g	*g*ive, *g*oat		wa*g*on		bi*g*, pi*g*		g		
4½	ng			dri*nk*		runni*ng*		ng		
4½	y	*y*es, *y*ellow		on*i*on				y		
5½	f	*f*an		tele*ph*one		kni*f*e		f		
6½	sh	*sh*oe		pu*sh*ed		di*sh*		sh		
6½	zh			trea*s*ure		gara*g*e		zh		
6½	v	*v*ine, *v*ase		o*v*en		sto*v*e		v		
6½	th (voiced)	*th*at		fa*th*er		ba*th*e		th (voiced)		
6½	l	*l*ook, *l*eaf		mi*l*k		ba*ll*		l		
7½	s	*s*oup		ice cream		bu*s*		s		
7½	z	*z*oo		sci*ss*ors		bu*zz*		z		
7½	j	*j*ump		a*j*ar		bagga*g*e		j		
7½	th (voiceless)	*th*umb		bir*th*day		too*th*		th (voiceless)		
7½	r	*r*ock		be*rr*y		ca*r*		r		
7½	hw	*wh*y		no*wh*ere				hw		

Refer to current mental age

Articulation testing in the special classroom

For use with the mentally retarded it is best to find pictures which show clearly and realistically each of the words listed in the columns. If the children do not know what a word is, for example *vine*, or if it is too difficult to find a picture to represent a word, use another word and picture. (*Vase* could be used for *vine*.)

Show the child the picture and ask him, "What is this?" Listen to him pronounce the word, and if he has trouble saying it, put a check after it.

Types of defects

Sometimes the child completely *omits* the sound (ex., _oup for soup). Write omits in the column if he has this error.

Other times children will *substitute* one sound for another (ex., *d*oat for *g*oat). Note the sound he uses for

the correct one (*d* for *g*).

Distortions are another type of defect. If the sound is similar to the correct one, but not quite correct, make this notation.

Most frequently the sounds which are omitted are the most difficult to correct; those which are substituted are second most difficult; and those which are distorted are the easiest for the child to correct.

Mental age referents

The ages in the first column show the top chronological ages at which normal children are able to produce these sounds. For retarded children we should refer to their mental ages. We cannot always expect a seven year old with a much lower mental age to speak like a normal seven year old.

When starting auditory training and speech emphasis, it is best to start with earlier developing sounds (*t* is an easier sound to make than *r* or *s*).

From this articulation test we can obtain a rough estimate of the level of the child's speech development, and more specifically, we know which sounds he cannot say correctly.

Special teachers interested in a more extensive discussion of articulation testing and the determination of defective sounds, as well as methods of retraining, are referred to the Irwin-Duffy publication (No. 5 in the Bibliography). On the following pages the reader will find two extensive lists of references related to the theme of this brochure. The first is a briefly annotated bibliography from which sources the writer obtained many suggestions for the development of this bulletin. The second is a selected bibliography covering useful texts, pamphlets and materials for the use of parents, teachers, and speech therapists as well as workbooks children may use in speech improvement programs. This is followed by a listing of agencies and material sources from which the suggested items may be procured.

These references have been included to provide the special class teacher working in areas where no speech correction services are available, the means for self-improvement in her daily program of speech and language development. Where such services are available, further investigation of several of these sources should serve to reinforce and further implement the joint cooperative efforts of the local speech therapists and the teacher of the retarded.

BIBLIOGRAPHY

BACKUS, Ollie, and Jane Beasley. *Speech Therapy with Children*. Boston: Houghton Mifflin Co., 1951.

BERRY, Mildred F., and Jon Eisenson. *Speech Disorders*. New York: Appleton-Century-Crofts, Inc., 1956.

CLARKE, Ann M., and A.D.B. Clarke. *Mental Deficiency, The Changing Outlook*. Glencoe, Ill.: The Free Press, 1958. (See Chapter XVI)

CLIPMAN, Sylvia. *The Child's Book of Speech Sounds*. Boston: Boston Expression Co., 1954
Gives specific information on the formation of each sound with appropriate exercises.

IRWIN, John V., and John K. Duffy. *Speech and Hearing Hurdles*. Columbus, Ohio: School and College Service, 1951.

JOHNSON, Wendell, et al. *Speech Handicapped School Children*. New York: Harper and Brothers, 1956.
A clear presentation of speech problems and how to treat them, written for the classroom teacher.

JONES, Morris Van. *Speech Correction at Home*. Springfield, Ill.: Charles C. Thomas, 1957.
Suggestions to parents for aiding the child to correct his speech.

MYKLEBUST, Helmer R. *Auditory Disorders in Children*. New York: Grune and Stratton, Inc., 1954.

NEMOY, Elizabeth, and Serena Davis. *Correction of Defective Consonant Sounds*. Boston: Expression Co., 1954.
Teacher's Manual of ear training stories and motivated lessons.

ROSENZWEIG, Louis and Julia Long. *Understanding and Teaching the Dependent Retarded Child*. New York: Educational Publishing Corp., 1960.

SCOTT, Louise, and J. J. Thompson. *Speech Ways*. St. Louis, Mo.: Webster Publishing Co., 1955.
To aid the intermediate grade teacher in correcting consonant sounds.

SCOTT and Thompson. *Talking Time*. St. Louis, Mo.: Webster Publishing Co., 1951.
To aid the primary teacher in guiding speech development and correcting speech sounds.

UTLEY, Jean. *What's Its Name?* Urbana, Ill.: University of Ill. Press, 1950.
Complete picture procedure for teaching sounds and names of common objects to deaf and hard of hearing children.

VAN RIPER, Charles, and John V. Irwin. *Voice and Articulation*. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1958.

BUREAU FOR HANDICAPPED CHILDREN
SPEECH CORRECTION
SELECTED BIBLIOGRAPHY
AND SOURCES OF MATERIALS[1]

Prepared By
Gretchen M. Phair and Vernon J. Smith
Supervisors of Speech Correction

* ABNEY and Miniace *THIS WAY TO BETTER SPEECH* World Book Co., 2126 Prairie Av., Chicago 16, Ill. 1940 371.9 P. & T. (See Key)

AINSWORTH, Stanley *GALLOPING SOUNDS* Expression Co., Magnolia, Mass. 1950 Th.

AINSWORTH, Stanley *SPEECH CORRECTION METHODS* Prentice–Hall, Inc. 1948 371.9 B.

ARNOLD, Genevieve *SPEECH IS FUN* Order from Genevieve Arnold, University of Houston, Houston 4, Texas W.

*• BACKUS, Ollie & Beasley, Jane *SPEECH THERAPY WITH CHILDREN* Houghton Mifflin Co., 2590 Prairie Ave., Chicago 16, Ill. 1951 B.

BEASLEY, Jane *SLOW TO TALK* Teacher's College, 525 W. 120th Street, Columbia, New York 1956 P.& T.

• BERRY, Mildred F. and Eisenson, Jon *SPEECH DISORDERS* Appleton Century-Crafts, Inc., 35 W. 32d St., New York 1, New York 1956 371.914 B.

CHAPMAN, Myfanwy *SELF INVENTORY* Burgess Co., 426 S. Sixth St., Minneapolis, 1959 Th. and W.

EISENSON, Jon *STUTTERING, A SYMPOSIUM* Harper and Brothers, N.Y. 1958 B.

FAIRBANKS, Grant *VOICE AND ARTICULATION DRILLBOOK* Harper and Bros., N.Y. 1960 Th.

*• IRWIN, John V. and Duffy, John *SPEECH AND HEARING HURDLES* School and College Service, Station B., Columbus, Ohio 1951 371.914 P. & T.

IRWIN, Orvis *MANUAL OF ARTICULATION TESTING FOR USE WITH CHILDREN WITH CEREBRAL PALSY* Cerebral Palsy Review, 2400 Jardine Dr., Wichita 19, Kansas 1961 B.

IRWIN, Ruth Becky *SPEECH AND HEARING THERAPY* Prentice Hall, Englewood Cliffs, N.J. 1953 B.

• JOHNSON, Wendall *SPEECH PROBLEMS OF CHILDREN* Grune & Stratton, Inc., 381 4th Ave., New York 16, New York 1950 371.9 B. and P. & T.

• JOHNSON, Wendall & Others *SPEECH HANDICAPPED SCHOOL CHILDREN* Revised Edition Harper, 49 E. 33rd St., N. 6. 16 1956 371.9 B. and P. & T.

JOHNSON, Wendall *STUTTERING & WHAT YOU CAN DO ABOUT IT* University of Minnesota Press, Minneapolis 1961 371.914 P. & T.

• KIRK, Samuel A. *YOU AND YOUR RETARDED CHILD* MacMillan Co., N.Y. 1955 (Chpt. 8) 136.76 P. & T.

[1] ***Recommended for teachers of the mentally retarded for both background information (•) and teacher usage in the classroom (*).***

LANGDON, G. and Stout, I.W. *TEACHER–PARENT INTERVIEWS* Prentice-Hall, Inc. N.Y. 1954 371.103
B.

LASSERS, L. *EIGHT KEYS TO NORMAL SPEECH & CHILD ADJUSTMENT* State College, San Francisco, Californis
P.& T.

LASSMAN, Grace H. *LANGUAGE FOR THE PRESCHOOL DEAF CHILD* Grune & Stratton, N.Y. 1950 371.9
Th.

LLOYD, M. Pearl *OUR FIRST SPEECH BOOK* King Co., 4609 N. Clark St., Chicago 40, Ill. 1954
W. and P. & T.

MULDER, R. L. *LETS PLAY TALK* Oregon College of Education, Monmouth, Oregon, 1958
P. & T.

MYKLEBUST, Helmer *AUDITORY DISORDERS IN CHILDREN* Grune & Stratton, 381 4th Avenue, New York 16, N.Y. 1954 371.912
B.

*•NEMOY & DAVIS *CORRECTION OF DEFECTIVE CONSONANT SOUNDS* Expression Co., Magnolia, Mass. 1937 371.9
Th.

NEMOY, Elizabeth *SPEECH CORRECTION THROUGH STORY TELLING UNITS* Expression Co. Magnolia, Mass
Th.

PALMER, Charles E. *SPEECH AND HEARING PROBLEMS* Charles C. Thomas, Publisher, Springfield, Illinois 1961
P. & T.

PARKER, Jayne Hall *MY SPEECH WORKBOOK* The Interstate Printers & Publishers, Inc., Danville, Ill. 1961
Th. and W.

* SCHOOLFIELD, Lucille D. *BETTER SPEECH AND BETTER READING* Expression Co., Magnolia, Mass 1951 372.4
Th.

•SCHREIBER, Flora Rheta *YOUR CHILD'S SPEECH* G. P. Putnam's Sons, 121 Sixth Ave., New York 13, (Good for parents–describes acquisition of speech) 1956 649.1
P. & T.

SCOTT, Louise and Thompson, J. J. *SPEECH WAYS* Webster Publishing Co., 1808 Washington Avenue, St. Louis, 3, Mo. 1955 372.4
Th.

* SCOTT, Louise and Thompson, J. J. *TALKING TIME* Webster Publishing Co., 1808 Washington Avenue, St. Louis 3, Mo. 1951 372.4
Th. and P. & T.

SHERE, Marie O. *SPEECH & LANGUAGE TRAINING FOR THE CEREBRAL PALSIED CHILD* The Interstate Printers and Publishers. 19-27 N. Jackson St., Danville, Ill. 1961
P. & T.

SPOONER, Jane R. *TONY PLAYS WITH SOUNDS* The John Day Co., N.Y. Kdgn. Tr.

TRAVIS, Lee Edward *HANDBOOK OF SPEECH PATHOLOGY* Appleton-Century-Crafts, Inc. N.Y. 1957 371.914
B.

VAN RIPER, Charles *HELPING CHILDREN TALK BETTER* Science Research Associates, Inc., 57 West Grand Avenue, Chicago 10, Illinois (Pamphlet for parents)
P. & T.

•VAN RIPER, Charles *SPEECH CORRECTION* Prentice-Hall, Englewood Cliffs, N.J. Revision 1954 371.9

VAN RIPER, Charles *STUTTERING* National Easter Seal Society
P. & T.

•VAN RIPER, Charles & Irwin, J. V. *VOICE AND ARTICULATION* Englewood Cliffs, N. J. Prentice-Hall 1958 371.914

VAN RIPER, Charles *YOUR CHILD'S SPEECH PROBLEM* Harper & Bros., Publishers, N.Y. 1961
P. & T.

WELLS, Charlotte & Phair, Gretchen *SPEECH TRAINING FOR CLEFT PALATE CHILDREN A TEACHER PARENT GUIDE* Revision 1959 Bur. for Handicapped Children, Madison, Wis.
P. & T.

WEST, Robert, Ainsworth & Carr *REHABILITATION OF SPEECH* Revised Edition Harper 49 E. 33rd Street, New York 16 1957 371.9 B.

WOLF, F. W. and Kelder, G. A. *SOUNDS I SAY*, BOOK I, II Chronicle Guidance Publication, Moravia, N.Y. 1960 W.

YOUNG, Edna Hill & Hawk Sara Stinchfield *MOTO-KINESTHETIC SPEECH TRAINING* Stanford University Press Stanford, California 1955 Revision B.

*ZEDLER, Empress *LISTENING FOR SPEECH SOUNDS* Doubleday & Co., Inc. Garden City, New York 1955 371.94 Th.

KEY:

Th. – Therapy
P. & T. – Parents and Teachers
B. – Background
W. – Workbooks that children can use

Numbers listed at the end of titles are the catalogue numbers from the Traveling Library, 706 Williamson Street, Madison, Wisconsin

MATERIAL SOURCES

American Hearing Society
1800 H Street, N.W.
Washington 6, D.C.

Anthony School Equipment Co.
4143 North Bartlett
Milwaukee, Wis.
(Mirror and blackboards)

Charles Thomas, Publisher
301-327 Lawrence Avenue
Springfield, Illinois

Children's Record Guild
27 Thompson Street
New York 13, N.Y.
(Records)

Council for Exceptional Children
1201 16th Street, N.W.
Washington 6, D.C.

Creative Playthings
5 University Place
New York 3, New York
(Play equipment, records, noise makers)

Di-Bur Card Games
Box 1184
Pueblo, Colorado

Expression Company
Magnolia, Mass.
(Books for therapy)

Go-Mo Company
Box 143
Waterloo, Iowa
(Speech games, forms, clinic equipment)

Ideal Speech Materials Assoc.
6218 South Albany Avenue
Chicago 29, Illinois
(Games for sounds)

King Company
4609 N. Clark Street
Chicago 40, Illinois
(Books, games, clinic equipment)

National Society for Crippled Children and Adults, Inc.
2023 Ogden Avenue
Chicago 12, Illinois

Phonovisual Products, Inc.
P. O. Box 5625
Washington 16, D.C.
(Phonetic material)

Scott Foresman Co.
Chicago, Illinois
(Bryngelson-Glaspey test and cards)

Speech Materials
Box 786
Storrs, Conn.

Stanwix House, Inc.
Pittsburgh 4, Pennsylvania
(Therapy workbooks)

Talkalong Products
Box 444
Monterey, California

The Interstate Printers and Publishers
Danville, Illinois

U. S. Department of Health, Education and Welfare
Office of Education
Washington 25, D.C.

Webster Publishing Co.
1808 Wabash Avenue
St. Louis 3, Missouri
(Materials, books, records, filmstrips)

Word Making Productions
Box 305
Salt Lake City, Utah
(Picture cards for various sounds-indexed)